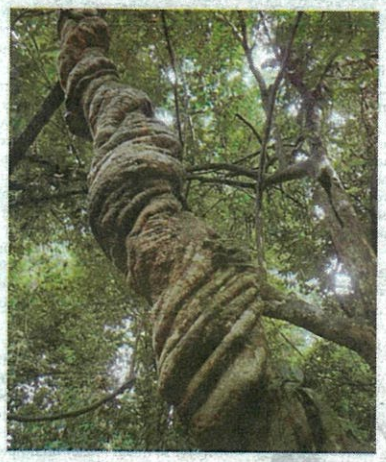
The beautiful Idea butterfly drifts through the trees as if dancing on the breeze. Photo: School of Ecology and Conservation, University of Agricultural Sciences, accessed through Wikimedia Commons.

Begonia ruthiae is one o
Begonia found at Ka

Kawag: Butterflies, I



Two different climbing lianas in the forest.
Photos: A.Phillipps

KAWAG is best known for its elephants but other animals have been spotted as well – orang-utans, gibbons, tarsiers, slow loris, leopard cats, civet-cats and flying squirrels, but even if you don't see many of these, the trails around the Lodge are very enjoyable, following shallow, clear streams, and holding a myriad of smaller delights.

Perhaps the most obvious of these are the leeches – like every other rainforest destination, Kawag has leeches, but it also has millipedes, spiders, cicadas and other bugs in amazing forms and colours, and butterflies, which are abundant around the the Lodge.

My favourites are the delicate Idea butterflies that drift so gracefully through the air, locally known as the 'kupu-kupu surat" or 'letter butterfly' from the dark spots on their gauzy wings.

Other beauties include the large black-and-yellow Troides birdwings and the unmistakable Rajah Brooke's birdwing with its green and jet-black wings. These are the larger butterflies but there are smaller beauties as well – white, yellow or brown often with spots, rings or patches of black – all seen from the comfort of the dining hall!

If you walk slowly along the trails and take the time to look, there is also much to see, including the beautiful trees of the forest themselves. Many of the bigger trees possess buttress roots, splaying out from the base of trunk – the size and form that these roots take are often indicative of the species, but why some trees do this and not others is still a bit of a mystery.

Some trees, generally the bigger ones, are thought to use buttress roots to stabilize themselves in the soil, particularly on slopes, and experiments have shown this to be true in certain cases. But buttresses can also develop on flat land and there is a dipterocarp tree (Shorea johorensis) on the Sungoi trail, following the Kawag river, which is 10m in length, and well worth seeing!

Another theory, based on the fact that tropical soils are generally poor in nutrients, and most tropical trees do not possess the long stabilising tap-roots that many trees of cooler climates do, is that the buttress roots help to collect valuable nutrients in the rainwater trickling down the trunk during storms, channelling it to where the roots are, under the soil.

But one of the most amazing features of the lowland tropical forest are the climbing lianas – sometimes looking like survivors from the time of the dinosaurs, they coil their way up into the canopy high above. About 90pc of all woody lianas are found in the tropi-

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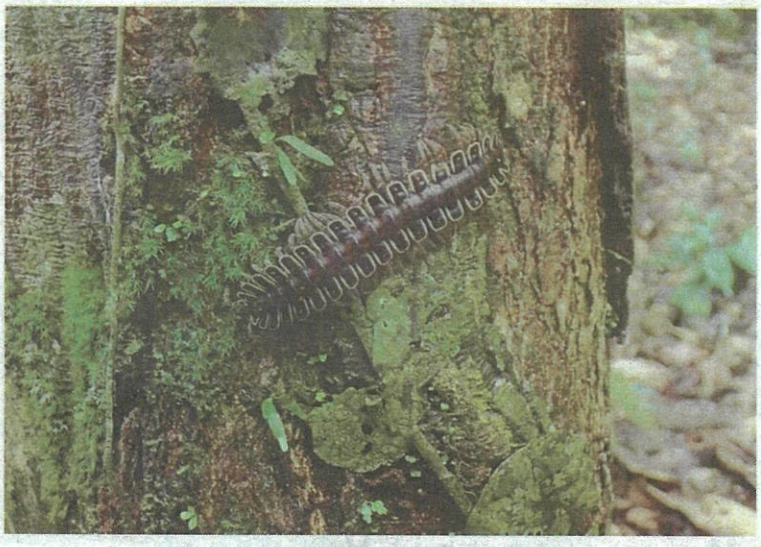
Anthea can be contacted at: antheakkphillipps@hotmail.com
She will gladly answer any question on this or related topics.

The Pill Millepede curls up into a ball when disturbed. Photo: A.Lamb

f several wild species of wag. Photo: A.Lamb



The commonest millepede we saw was the delightfully named Tractor Millepede. Photo: A.Phillipps

millipedes and lianas

The Puff-ball fungus is so-called because the spores are released in puffs through the tiny hole at the top when knocked by a raindrop or a passing animal. Photo: A.Lamb

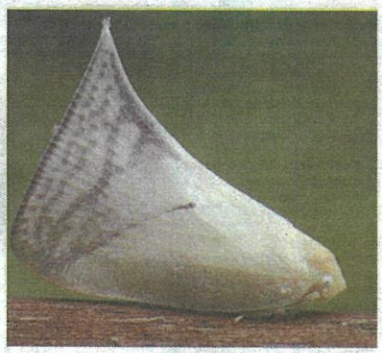
A gelatinous Jelly fungus! Photo: A.Lamb

cal forest and they seem to be especially common at Kawag, perhaps because many trails follow streams which allow more light to reach the forest floor.

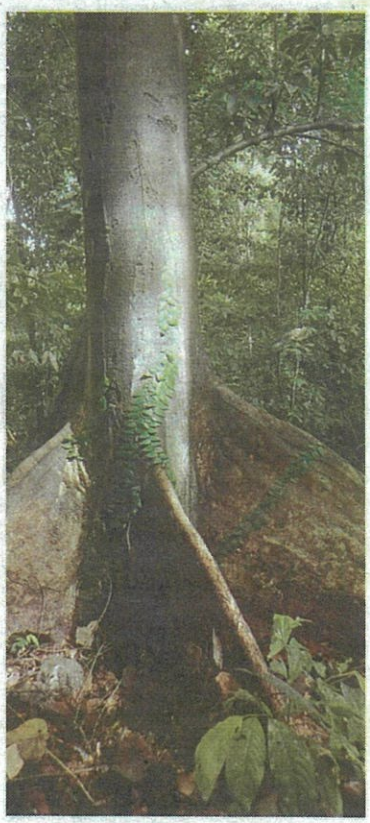
Millipedes are common amongst the leaf litter on the forest floor and on the lower part of the tree trunks, feeding off the decaying leaves and bark and wild begonias and gingers are often seen in flower by the side of the path. Small bugs, dragonflies and cicadas lie camouflaged against the tree trunks.

Fungi are also common in huge variety of forms and colours, and play what is probably the most important role of all in the forest ecosystem.

Nearly all tropical trees have an intimate relationship with mycorrhizal fingi which live in and around their roots. These fungi help the trees absorb nutrients from the soil. Many of the mushrooms and other fungi you see in the forest are merely the fruiting bodies of these mycorrhizal fungi, which exist mainly as a mat of thin filaments within the soil, reaching metres around the tree, but there is still much we do not understand about these amazing partnerships.



This curious bug surprised us on the boardwalk one morning. Photo: A.Phillipps



Buttress roots are a common feature of many larger forest trees, though their function needs further study. Photo: A.Phillipps